

"110 Years of Tradition, Service and Excellence."

GRAMBLING STATE UNIVERSITY HVAC COOLING TOWER & PUMPS REPLACEMENTS

MCCALL DINNING BUILDING



Prepared February 8, 2012
Proprietary and confidential

INVITATION TO BID

ADVERTISEMENT FOR BIDS

Sealed bids will be accepted in the office of the Purchasing Director in the Purchasing Department, located at 403 Main Street, Grambling, Louisiana until 2:00 p.m. CT March 12, 2012 at which time they will be publicly opened and read aloud.

Bid # 50018120010: Replacement of the old Marley cooling Tower (NC-221) with a new Marley Cooling Tower (NC Series), (Exact Replacement)

A Pre-Bid conference will be held on February 27, 2012 at 10:00 a.m. at the address stated above.

Bids must be returned to the Purchasing Office in a sealed envelope/container. Bids must be submitted on the form enclosed herewith (Proposal Form), and in strict conformity with the intent of same without modifications. Bids must be legibly signed in ink, dated, and title of person signing bid must be shown on bid.

Complete bidding documents may be obtained from the Grambling State University Purchasing Department, Grambling, Louisiana, 71245, (318)274-3280 or gipsonm@gram.edu. Bidding documents will be available on or about February 8, 2012 on State of Louisiana LaPac site http://doa.louisiana.gov/osp/osp.htm. Use bid #50018120010.

Bids of \$50,000.00 or more will be considered only when the bidder certifies that he holds a current valid Louisiana Contractors license of proper classification and shows the current license number on the sealed bid envelope/container and above his signature on the bid forms as required under R.S. 37:2150-2163. Contractors desiring to bid shall submit evidence that they have a current Louisiana Contractors license of proper classification. All bids must be accompanied by bid security equal to five percent (5%) of the base bid and any additive alternates and must be in the form of a certified check, cashier's check or bid bond written by a company licensed to do business in Louisiana.

The successful bidder will be required to provide a performance and payment bond written by a company licensed to do business in Louisiana in an amount equal to 100% of the contract amount.

No bid may be withdrawn for a period of sixty (60) days after receipt of bids.

The Owner reserves the right to reject any/all bids and waive any informalities incidental thereto.

Grambling State University adheres to the equal opportunity provisions of federal civil rights laws and regulations.

INSTRUCTIONS TO BIDDERS

ARTICLE 1

DEFINITIONS

- 1.1 The Bidding Documents include the following:
 - 1. Instructions to Bidders
 - 2. Bid Form
 - 3. Contract between Owner and Contractor
 - 4. Performance and Payment Bond
 - 5. Affidavit of Compliance with Act 38, 1965 Louisiana State Legislature
 - 6. General Conditions of the Contract for Chiller Replacement
 - 7. Supplementary (and amended General) Conditions
 - 8. Divisions of the Technical Specifications
 - 9. Addenda issued during bid period. (By Owner and acknowledged in bid form)
- 1.2 Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Contract is executed.

ARTICLE 2

BIDDER'S REPRESENTATION

- 2.1 Each bidder, by submitting a bid, represents that s/he has read and understands the bidding documents.
- 2.2 Each bidder, by submitting a bid, represents that s/he has visited the site and familiarized themselves with the local conditions under which the work is to be performed.
- 2.3 Each bidder by submitting a bid understands they must be fully qualified under any state or local licensing law for Contractors in effect at the time and at the location of the project before submitting a bid. In the State of Louisiana; only the bids of contractors and sub-contractors duly licensed under Louisiana Revised Statute 37:2150, et. seq., will be considered, if applicable. The Contractor shall be responsible for ensuring all Sub-contractors or prospective Sub-contractors are duly licensed in accordance with the statute above.
- 2.4 Each bidder submitting a bid understands that GSU's Public Works Policy related to contractor licensure is that a contractor's license is required for any/all projects with an anticipated/bid cost greater than \$50,000

INVITATION TO BID

1. SCOPE (base Bid)

The scope of this project is the replacement of the Series), (Exact Replacement) as specified in speci	e old Marley cooling Tower (NC-221) with a new Marley Cooling Tower (NC fications below.
WORDS	\$ FIGURES
WORDS	FIGURES
2. <u>Alternate Bid # 1</u>	
	ary to provide the following systems, each complete and in proper operating f chilled water and condenser water pumps. This includes both pumps for
	\$
WORDS	FIGURES
Alternate Bid # 2	
	nt necessary to provide the following systems, each complete and in proper new Trane (130 ton) chiller. This includes the removal of old non-functional
WORDS	\$ FIGURES

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO:	BID FOR: HVAC Cooling Tower & Pumps Replacements	
(Owner to provide name and address of owner)	(Owner to provide name of project and other ide information)	ntifying
The undersigned bidder hereby declares and represents that Documents, b) has not received, relied on, or based his bid or addenda, c) has personally inspected and is familiar with the prappliances and facilities as required to perform, in a work completion of the referenced project, all in strict accordance with Grambling, Louisiana and dated: February 8, 20 (Owner to provide name of entity preparing bidding documents). Bidders must acknowledge all addenda. The Bidder acknowledge all addenda that the Bidder is TOTAL BASE BID: For all work required by the Bidding Documents.	she/he; a) has carefully examined and understand any verbal instructions contrary to the Bidding Do roject site, and hereby proposes to provide all labor, manlike manner, all work and services for the country that the Bidding Documents prepared by: Grambling 12.	materials, tools, onstruction and State University.
but not alternates) the sum of:	Dollars (\$	
ALTERNATES: For any and all work required by the Biddesignated as alternates in the unit price description. Alternate No. 1 (Owner to provide description of alternate and	d state whether add or deduct) for the lump sum of:	
Alternate No. 2 (Owner to provide description of alternate an	d state whether add or deduct) for the lump sum of:	
Alternate No. 3 (Owner to provide description of alternate and		
	Dollars (\$)
NAME OF BIDDER: ADDRESS OF BIDDER:		
SIGNATURE OF AUTHORIZED SIGNATORY OF BIDD	ER **:	

* The <u>Unit Price Form</u> shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(A)(1)(c) or RS 38:2212(O).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.

BIDDING PROCEDURES

- 3.1 Calendar of Events:
 - 3.1.1 Invitation to Bid Release Date: February 8, 2012.
 - 3.1.2 Pre-Bid Conference: A Pre-Bid Conference will be held at 10:00 a.m., February 27, 2012 in the Purchasing Department Conference Room located at 403 Main St. Grambling, LA.
 - 3.1.3 Deadline to receive bidder inquiries: 10:00 a.m. February 27, 2012.

 Deadline for responses to Bidder Inquiries: March 5, 2012.

NOTES: Inquiries MUST be submitted in writing the: Ms. Connie Hampton, Director of Purchasing at Grambling State University. Inquiries may be submitted via the U.S. postal service to P. O. Box 1169 or commercial carrier to 403 Main Street, Grambling, LA 71245.

Inquiries may be submitted to Ms. Hampton via email at hamptonc@gram.edu

- 3.1.4 Bid Opening Date: March 12, 2012.
- 3.2 Bids must be prepared on the forms provided by the Owner (Proposal form) and submitted in accordance with the Instructions to Bidders.
- 3.3 A bid will be considered invalid if not deposited at the designated location prior to the time and date for receipt of bids indicated in the advertisement or invitation to bid, or prior to any extension thereof issued to the bidders.
- 3.4 Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his bid or any part thereof for thirty days after the receipt of bids. However, written request (letter or telegram) for the withdrawal of a bid or any part thereof will be granted if the request is received prior to the specified time of opening. Formal bids, amendments thereto or request for withdrawal of bids or any part thereof received after time specified for bid opening will not be considered whether delayed in the mail or for any other cause whatsoever.
- 3.5 Bids are to be sealed and will be received until the time specified and at the place specified in the advertisement for bids. It shall be the specific responsibility of the Bidders to deliver sealed bids to Grambling State University at the appointed place and prior to the announced time for the opening of bids. Late delivery of a bid for any reason including late delivery by the United States Mail shall disqualify the bid.
 - Bids shall be considered valid for acceptance for a period of sixty (60) days after opening.
- 3.6 Prior to the receipt of bids, Addenda, if any, will be mailed or delivered (hard copy or email) to each person or firm recorded by the Owner as having received the bidding documents and will be available for inspection wherever the bidding documents are kept available for that purpose. Addenda issued after receipt of bids will be mailed or delivered only to the sealed bidder.
- 3.7 Bids for Public Works will not be considered or accepted unless the bid is accompanied by bid security in an amount of not less than five percent (5%) of the sum of the Base Bid and any Alternates. The bid security shall be in the form of a certified check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a bid bond written by a surety company licensed to do business in Louisiana, accompanied by appropriate power of attorney and in favor of Grambling State University.
- 3.8 All Bids and Sureties must be signed by a duly authorized person of the firm or corporation and be accompanied by legal evidence authorizing the signature as valid.
- 3.9 Any interpretation, correction or change of the Bidding Documents will be made by Addendum. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and bidders shall not rely upon such interpretations, corrections and changes.

- 3.10 If bidding other than as specified, an indication must be made on the bid form, stating manufacturer's name and model number(s) being submitted for bid. Detailed specifications, drawings, pictures, brochures, diagrams or any other literature or information necessary to determine the equality of the bid response must be included with the bid form.
- 3.11 Prior to the issuance of a purchase order the successful bidder must submit the following items to the Purchasing Department, if applicable:
 - a. Notarized affidavit
 - b. Signed contract
 - c. Insurance Certificate
 - d. Proof of filing of Performance and Payment Bond with Power of Attorney, if applicable, and,
 - Resolution of the Board of Directors, if incorporated granting signature authority to sign binding contracts on behalf of the business.

In accordance with La. R.S. 39:1615 C. And E., any contract entered into by Grambling State University as a result of this bid shall include the following Fiscal Funding Clause:

The continuation of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the legislature. If the legislature or Grant Funding Agency fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the Governor or by any means provided in the appropriations act or Title 39 of the Louisiana Revised Statutes of 1950 to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated."

ARTICLE 4

EXAMINATION OF BIDDING DOCUMENTS

4.1 Each bidder shall examine the bidding documents carefully and, not later than seven days prior to the date for receipt of bids, shall make written request to the Owner for interpretation or correction of any ambiguity, inconsistency or error therein which he may discover. Any interpretation or correction will be issued as an Addendum by the Owner. Only a written interpretation or correction by Addendum shall be binding. No bidder shall rely upon any interpretation or correction given by any other method.

ARTICLE 5

SUBSTITUTIONS

5.1 Each bidder represents that his bid is based upon the materials and equipment described in the bidding documents.

MANUFACTURER'S NUMBERS OR TRADE NAMES:

5.2 Where a manufacturer's product is named or specified, it is understood that "or equal" shall apply, whether stated or not. Such name and number is meant to establish the standard of quality desired and does not restrict bidders to the specific brand, make, manufacturer, or specification named; and are set forth and convey to prospective bidders the general style, type, character, and quality of product desired; and that equal products will be acceptable. Grambling State University shall determine whether the material is equal to that specified.

ARTICLE 6

REJECTION OF BIDS

6.1 The bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality in any bid received. In addition, the bidder recognizes the right of the Owner to reject a bid if the bidder failed to furnish any required bid security, or to submit the data required by the bidding documents, or if the bid is in any way incomplete or irregular.

ARTICLE 7

AWARDS

7.1 Awards may not be made to any person, firm, or company in default of any contract. Said person, firm, or company shall be considered non- responsible bidders and may be reinstated and awards made to them only after they have given evidence of good faith and have satisfactorily completed their obligations.

PUBLICIZING AWARDS

7.2 Written notice of award shall be sent to the successful bidder. In procurement over \$25,000, each unsuccessful bidder shall be notified of the award provided that he/she submitted with his/her bid a self-addressed envelope requesting this information. Notice of award will be made a part of the procurement file.

RIGHT TO PROTEST

Any person who is aggrieved in connection with the solicitation or award of a contract shall protest to the Director Purchasing. Protests with respect to a solicitation shall be submitted in writing at least two days prior to the opening of bids on all matters except housing of state agencies, their personnel, operations, equipment, or activities pursuant to R.S. 39:1643 for which such protest shall be submitted at least ten days prior to the opening of bids. Protests with respect to the award of a contract shall b submitted in writing within fourteen days after contract award.

AUTHORITY TO RESOLVE PROTESTS:

7.4 Prior to the commencement of an action in court concerning any controversy, the Director of Purchasing or his/her designee shall have the authority, to resolve the protest of any aggrieved person concerning the solicitation or award of a contract. This authority shall be exercised in accordance with regulations.

ARTICLE 9

PAYMENT

9.1 All payments shall be made by Grambling State University through Title III Federal Funding.

ARTICLE 10

TAXES

10.1 Applicable taxes are to be included in lump sum bid.

ARTICLE 11

GUARANTEE

11.1 The materials and labor under this contract, as described in the specifications, shall be guaranteed by the Contractor for a period of <u>one year</u> from date of its acceptance against defects of materials or workmanship. Any defects which develop during this period shall be properly repaired or replaced without cost to the Owner as soon as possible. Also must provide manufactory's warranty.

ACCEPTANCE

11.2 The guarantee covering materials and labor under this contract will begin the date a Notice of Acceptance is issued to the Contractor by Grambling State University.

ARTICLE 12

CHANGES IN THE WORK

12.1 A Change Order is a written order to the Contractor signed by the Owner, issued after execution of the Contract, authorizing a Change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the

Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time. Any Change Order not signed by the Owner will be considered null and void.

- 12.2 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents.
- 12.3 Any change order in excess of the contract limit as defined herein shall be let out for public bid. The term contract limit as used herein shall be equal to the sum of \$30,000 per project. When the Change Order is negotiated it shall be fully documented and itemized as to cost, including material quantities, material costs, insurance, employee benefits, other related costs, profit and overhead. Where certain unit prices are contained in the initial contract no deviation shall be allowed in computing negotiated change order cost.

SUPPLEMENTARY CONDITIONS

ARTICLE 1

CONTRACTOR

CONTRACTOR'S LICENSE

1.1 On any bid amounting to \$50,000 or more, the Contractor shall certify that s/he is licensed under Act 377 of the 1976 Louisiana Regular Legislative Session and show the contractor license number and the <u>bid</u> number on the front portion of the sealed <u>envelope/container</u>; except projects financed, partially or wholly, with Federal Funds, provided that any successful Bidder before signing Contract thereon, files application for a license and pays the fee as provided in this Act and complies with all terms and provisions of this Act and with the rules and regulations of the Licensing Board.

CONTRACTOR'S AFFIDAVIT

1.2 In accordance with the Louisiana R.S. 38:2190 - 2220, if the Contract is awarded to the successful Bidder, the bidder shall, at the time of the signing of the Contract, execute the AFFIDAVIT included in the Contract Documents.

INTEREST

1.3 There shall be no payment of interest on money owed.

ARTICLE 2 PAYMENTS AND COMPLETION

SUBSTANTIAL COMPLETION

2.1 The Owner will issue a NOTICE OF ACCEPTANCE to the Contractor upon acceptance of the completed project.

FINAL COMPLETION AND FINAL PAYMENT

2.2 The Contract is to provide that the contractor is not to be paid more than ninety percent (90%) of the amount of the contract prior to completion of the work. At the completion and acceptance of the project, the remaining ten percent (10%) will be paid.

LIQUIDATED DAMAGES

2.3 The Owner will suffer financial loss if the Project is not substantially complete on the date set forth in the CONTRACT DOCUMENTS. The Contractor (and/or Surety) shall be liable for and shall pay to the Owner Liquidated Damages for each calendar day of delay until the work is Substantially Complete.

The <u>Completion Time</u> stated in Consecutive Calendar Days and the <u>Liquidated</u> <u>Damages</u> stated in Dollars Per Day are listed in the PROPOSAL FORM

ARTICLE 3

INSURANCE

<u>INSURANCE</u>: Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. <u>The cost of such insurance shall be included in the Contractor's bid</u>.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

 Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001). "Claims Made" form is unacceptable. The "occurrence form" shall not have a "sunset clause."

- 2. Insurance Services Office form number CA 0001 (Ed. 1/78) covering Automobile Liability and endorsement CA 0025 or CA 0001 12 90. The policy shall provide coverage for owned, hired, and non-owned coverage. If an automobile is to be utilized in the execution of this contract, and the vendor/contractor does not own a vehicle, then proof of hired and non-owned coverage is sufficient.
- Workers' Compensation insurance as required by the Labor Code of the State of Louisiana, including Employers Liability insurance.

B. MINIMUM LIMITS OF INSURANCE

Contractor shall maintain limits no less than:

- Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
- 2. Automobile Liability: \$1,000,000 combined single limit per accident, for bodily injury and property damage.
- 3. Workers Compensation and Employers Liability: Workers' Compensation limits as required by the Labor Code of the State of Louisiana and Employers Liability coverage.

C. BUILDER'S RISK COVERAGE

A General Contractor shall purchase and maintain property insurance upon the entire work included in the contract for an amount equal to the greater of the full-completed value or the amount of the construction contract including any amendments thereto. The general contractor's policy shall provide "ALL RISK" Builder's Risk Insurance (extended to include the perils of wind, collapse, vandalism/malicious mischief, and theft, including theft of materials whether or not attached to any structure.) The "ALL RISK" Builder's Risk Insurance must also cover architects' and engineers' fees that may be necessary to provide plans and specifications and supervision of work for the repair and/or replacement of property damage caused by a covered peril not to exceed 10% of the cost of those repair and/or replacements.

Flood coverage shall be provided by the Contractor on the first floor and below for projects North of the Interstate Corridor beginning at the Texas-Louisiana border at Interstate 10 East to the Baton Rouge junction of Interstate 12, East to Slidell junction with Interstate 10 to Louisiana-Mississippi border. Flood sub-limit shall equal an amount no lower than ten percent (10%) of the total contract cost per occurrence. Coverage for roofing projects shall not require flood coverage.

On projects <u>South</u> of this corridor, flood coverage shall be provided by the State of Louisiana, as the owner, through the National Flood Insurance Program (NFIP). The Contractor will be liable for the \$5,000 deductible on the NFIP policy from the Notice to Proceed date through the Notice of Final Acceptance date of the project.

A specialty contractor shall purchase and maintain property insurance upon the system to be installed for an amount equal to the greater of the full-completed value or the amount of the contract including any amendments thereto. The specialty contractor may provide an installation floater with the same coverage as the "ALL RISK" Builder's Risk Insurance policy.

The policy must include the interest of the Owner, Contractor and Subcontractors as their interest may appear. The contractor has the right to purchase coverage or self-insure any exposures not required by the bid specifications, but shall be held liable for all losses, deductibles, self-insurance for coverage not required.

Policies insuring projects involving additions, alterations or repairs to existing buildings or structures must include an endorsement providing the following:

In the event of a disagreement regarding a loss covered by this policy which may also be covered by the State of Louisiana policy of self-insurance or any commercial property insurance policy purchased by the State of Louisiana, Office of Risk Management (ORM) covering in excess of the State of Louisiana, policy of self-insurance, this company agrees to follow the following procedure to establish coverage and/or the amount of loss:

Any party to a loss may make written demand for an appraisal of the matter in disagreement. Within 20 days of receipt of written demand, this company and either ORM or its commercial insurance company shall each select a competent and impartial appraiser and notify the other of the appraiser selected. The two appraisers will select a competent and impartial umpire. The appraisers will then identify the policy or policies under which the loss is insured and, if necessary, state separately the value of the property and the amount of the loss that must be borne by each policy. If the two appraisers fail to agree, they shall submit their differences to the umpire. A written decision by any two shall determine the policy or policies and the amount of the loss. Each insurance company (or ORM) agree that

the decision of the appraisers and the umpire if involved, will be binding and final and that neither party will resort to litigation. Each of the two parties shall pay its chosen appraiser and bear the cost of the umpire equally.

D. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Agency, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

E. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

- 1. General Liability and Automobile Liability Coverage
 - a. The Agency, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "additional insured" as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an insured" automatically provides liability coverage in favor of Grambling State University and the State of Louisiana.
 - b. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Agency, its officers, officials, and employees, Boards and Commissions or volunteers.
 - c. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 2. Workers' Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, officials, employees and volunteers for losses arising from work performed by the Contractor for the Agency.

3. All Coverage

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Agency.

F. <u>ACCEPTABILITY OF INSURERS</u>

Insurance is to be placed with insurers with an A.M. Best's rating of "A- VI or higher". This requirement will be waived for workers' compensation coverage only for those contractors whose workers' compensation coverage is placed with companies who participate in the State of Louisiana Workers' Compensation Assigned Risk Pool or the Louisiana Workers' Compensation Corporation.

G. <u>VERIFICATION OF COVERAGE</u>

Contractor shall furnish the Agency with certificates of insurance affecting coverage required by this clause. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates are to be received and approved by Grambling State University before work commences. Grambling State University reserves the right to require complete, certified copies of all required insurance policies, at any time.

H. <u>SUBCONTRACTORS</u>

Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

ARTICLE 4

QUALITY

STANDARD OF QUALITY

1.1 Where catalog numbers and/or manufacturer's names are referred to in the specifications, they are used for the purpose of conveying to the prospective bidders the type and design of equipment, or supplies desired; but it shall be understood that bidders may submit on other makes in lieu of that mentioned, providing such other item is similar in design and equal in quality. It is not expected that the items of all manufacturers shall conform exactly to every detail and dimension mentioned in the specifications; but the essential features of the items mentioned shall be provided in the items to be furnished.

COOLING TOWER REPLACEMENT SPECIFICATIONS

SECTION 15000

GENERAL PROVISIONS

PART 1 GENERAL

1.1 <u>SCOPE (base Bid)</u>

The scope of this project is the replacement of the old Marley cooling Tower (NC-221) with a new Marley Cooling Tower (NC Series), (Exact Replacement) at McCall Dining Hall. The new equipment shall run (controls and mechanics) with the existing operational chiller in the building. The contractor shall provide all labor, materials, equipment, etc., required to fulfill the intent of the Contract Documents. It is noted that the alternate scope includes replacing both condensing and chill water pumps.



- Demolition of Existing Equipment: Remove existing cooling tower, piping, electrical, controls, materials, and
 systems as required to support installation of new towers and required components. Site inspection is required to
 verify the extent of demolition. Owner has first claim on all removed materials or equipment. Contractor shall
 dispose of all items not retained by Owner.
- 2. Furnish and install all HVAC equipment as indicated in specifications.
- 3. Furnish and install HVAC piping with associated specialties and insulation.
- 4. Furnish water treatment piping systems and components as needed and reconnect to new water treatment system. Contractor shall verify existing water treatment system and remove. Contractor is to provide any necessary labor, materials (piping, electrical, and other) for the installation new chemical treatment for the system. The chemical equipment only will be furnished by owner.
- Furnish temperature control systems and components as needed and reconnect to existing temperature control system. Contractor shall verify that existing temperature control system controls new tower the same as original installation.
- 6. Perform testing and balancing as required for mechanical systems. Testing and balancing may be performed by Mechanical Contractor.
- 7. Perform flushing of the entire chill water, water piping, and other systems that will be necessary to insure a clean environment for the new and existing equipment to this building.

1.13 <u>Alternate Bid # 1</u>

Furnish all labor, materials and equipment necessary to provide the following systems, each complete and in proper operating condition, all as specified herein for installation of chilled water and condenser water pumps. This includes both pumps for each chiller.



1.12 <u>Alternate Bid # 2</u>

Furnish all labor, materials, piping, and equipment necessary to provide the following systems, each complete and in proper operating condition, all as specified herein for a new Trane (130 ton) chiller. This includes the removal of old Trane Chiller.



1.2 RELATED SECTIONS

A. Section 15100 - .

1.3 REFERENCED STANDARDS

- A. All work shall be performed in full accord with the latest editions of the applicable state and national building codes and local ordinances.
- B. Refer to each section for applicable codes and reference standards.

1.4 FEES, PERMITS, AND TAXES

A. The contractor shall make arrangements for and pay for all inspection fees, connection fees, and permits required by the local authorities. The contractor shall also pay all taxes applicable to the job.

1.5 SUBMITTALS

See section 15100 for submittal requirements

1.6 PRIOR APPROVAL

A. Where the contractor wishes to substitute equipment or materials under an "or equal" clause, he shall submit to the school in writing seven (7) working days prior to bid opening lists of proposed substitutions which, from published manufacturer's data, meets or exceeds the features of the specified equipment. Approvals will be issued in writing by addendum.

1.7 OPERATING AND MAINTAINING MANUALS

Provide (2) two copies and (1) electronic copy of all installation, operation, and maintenance manuals to the owner on all equipment provided.

1.8 DEMOLITION

A. The contractor shall be responsible for the removal and disposal of the existing equipment. This includes any piping, electrical, and other items left on the roof of the building.

1.10 CONSTRUCTION REQUIREMENTS

- A. The contractor is responsible for fitting his material and equipment into the building and shall carefully lay out his work at the site to conform to the structural conditions, to provide proper grading of lines, to avoid all obstructions and to conform to the details of the installation supplied by the manufacturer of the equipment to be installed. Furnish all necessary material, lines, etc.
- B. The contractor shall be responsible for meeting all applicable local, state, and federal building code requirements. The contractor shall be responsible for obtaining any required permits and licenses.
- C. The project shall be completed within 30 days of the date the tower arrives on site. The contractor shall notify the university in writing when all material is to arrive at the project site.
- D. The contractor shall remove old tower and install a new Marley tower (NC series). MATERIAL AND METHODS are to comply with all applicable UL RATING requirements. Contractor is to make necessary modifications to existing support rack to insure the new tower meets the structural requirements of the new tower.
- E. Contractor shall furnish and install all electrical and plumbing work as required and necessary to fully operate and control the new cooling tower.
- F. Contractor is to secure new tower per manufacturer's recommendations, to existing support rack on top of the building.
- G. The contractor is to make all necessary piping tie ends for the new tower and existing piping coming. All piping shall be secured per code requirements and the manufacturer's recommendations.
- H. The contractor is responsible cleaning up all material and debris left on roof. This includes any existing material or debris.
- I. The contractor is responsible for removal and replacing (2) condensing and (2) chill water pumps and motors. This includes replacement existing shut off valves. This also includes all necessary electrical and piping requirements.

- J. All exposed chill and condensing pipes shall be insulated according to manufacturer's recommendations and code requirements. Plastic wrap is acceptable.
- K. Furnish water treatment piping systems and electrical components as needed and connect to new water treatment system(supplied by owner). Contractor shall verify that water treatment system protects new tower the same as current installation.
- L. Furnish temperature control systems and components as needed and reconnect to existing temperature control system. Contractor shall verify that existing temperature control system controls new tower the same as original installation.

1.12 PAINTING REQUIREMENTS

Mechanical Contractor shall leave all surfaces clean, rust free and ready for painting. Painting of mechanical materials or equipment shall be performed under this scope of work by contractor that specializes in painting. Painting shall have been established for longer than three years with specialization in painting.

- A. All equipment shall have factory finish or shop coat of paint as specified, and any surfaces scratched or marred in handling shall be touched up to match factory finish.
- B. All un-insulated steel surfaces exposed to sight within building, which do not have factory prime or galvanized coating, shall be cleaned and painted with one coat of rust inhibiting primer. In addition, all surfaces in finished spaces shall also be painted with two coats of finish paint in a color selected by the Owner..
- C. Steel items exposed outside the building (e.g., pipe/equipment supports, exposed ferrous items, piping and hangers, etc.) shall be cleaned and painted with one coat of rust inhibiting primer and two coats of asphaltic base aluminum paint. Insulated steel pipes outside the building shall be cleaned and painted with one coat of rust inhibiting primer before installing insulation.
- D. All exposed piping outside the building serving cooling tower (both new and existing) shall be painted with UV resistant paint.

1.14 STARTING AND TESTING:

Start, test installation, and instruct Owner in the proper operation and maintenance procedures on all installed equipment. Refer to Test and Balance Requirements.

- A. Operation and Maintenance Manual: Three (3) indexed bound sets of the operation and maintenance manuals shall be provided to the Owner at turnover and is required for final acceptance.
- B. Entire chill water cooling loop system shall be flushed as many times as needed to insure no debris is left system before cooling tower becomes operational.
- C. The testing/starting will include the cleaning the tubes and flushing the system of the one existing operational chiller.

SECTION 15100

Cooling Tower

PART 1 GENERAL

1.01 SUBMITTALS

- A. Submit shop drawings indicating components, assembly, dimensions, weights and loadings, required clearances, and location and size of field connections. Indicate valves, strainers, and valves required for complete system.
- B. Submit product data indicating rated capacities, weights, specialties and accessories, electrical requirements, and wiring diagrams.
- C. Submit manufacturer's installation instructions.

1.02 OPERATION AND MAINTENANCE DATA

A. Include manufacturer's descriptive literature, start-up instructions, and maintenance procedures.

1.06 REGULATORY REQUIREMENTS

A. Unit shall conform to ASME Standards.

1.07 HANDLING

- A. Comply with manufacturer's installation instructions for rigging, unloading, and transporting units.
- B. Protect units from physical damage. Factory shipping covers and skids shall be kept in place until installation.

1.08 WARRANTY

- A. Marley Standard Warranty on cooling tower.
- B. One year Contractor's warranty on installation from date of final acceptance of work. All work provided under this contract shall be subject to a minimum one-year warranty from date of final acceptance of work. The warranty shall include-Prompt repair or replacement of equipment or system failure. Repair or replace any defects without cost to Owner including all parts, labor, travel time, expenses.

PART 2 PRODUCTS

2.01 APPROVED MANUFACTURERS

Marley (NC Series) Cooling Tower only (Exact Replacement). This is to match existing piping in and on building.